

Appendix for Test Report



Appendix A: DTS (6 dB) Bandwidth

In this document, the "DTS6dBBW" refers to the measured "DTS (6 dB) Bandwidth" value. In this Appendix, the "fc(DTS6dBBW)" refers to the centre of the measured "DTS6dBBW". The introduction of the "fc(DTS6dBBW)" is due to that other measurements use it as the spectrum analyzer setting.

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

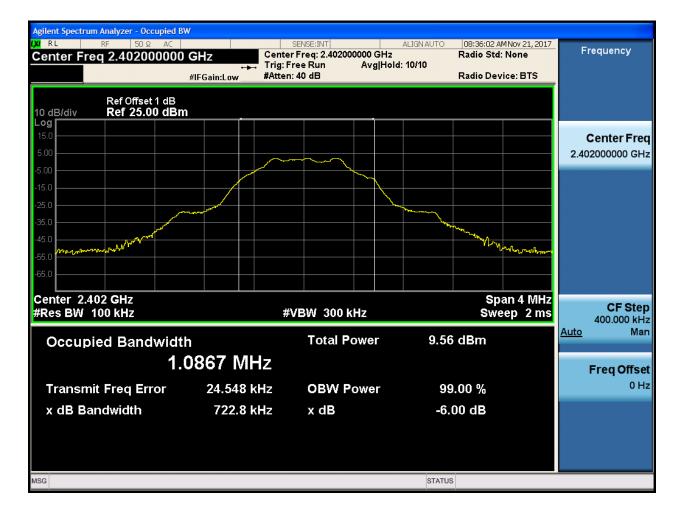
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	DTS6dBBW[KHz]	Verdict
TM1 _Ch0	L	2402	722.8	pass
TM1 _Ch19	М	2440	724.7	pass
TM1 _Ch39	Н	2480	724.4	pass



Part II - Test Plots

2.1 TM1_Ch0_L





2.2 TM1_Ch19_M

Agilent Spectrum Analyzer - Occupi XIRL RF 50Ω A Center Freq 2.4400000	000 GHz	SENSE:INT Center Freq: 2.440000 → Trig: Free Run #Atten: 40 dB	ALIGN AUTO 000 GHz Avg Hold>10/10	08:42:49 AMNov 21, 2017 Radio Std: None Radio Device: BTS	Frequency
Ref Offset 1 d 10 dB/div Ref 25.00 d					
Log 15.0 5.00					Center Freq 2.440000000 GHz
-5.00					
-35.0				and the second s	
-55.0					
Center 2.44 GHz #Res BW 100 kHz		#VBW 300 kH	lz	Span 4 MHz Sweep 2 ms	CF Step 400.000 kHz
Occupied Bandwi		Total Po	wer 10.0	0 dBm	<u>Auto</u> Man
	1.0832 M				Freq Offset
Transmit Freq Error				9.00 %	0 Hz
x dB Bandwidth	724.7	kHz x dB	-6.	.00 dB	
MSG			STATU	s	



2.3 TM1_Ch39_H

Agilent Spectrum Analyzer - Occupied I		SENSE:INT		AMNov 21, 2017	Frequency		
	Center Freq 2.480000000 GHz Center Freq: 2.480000000 GHz Radio Std: None #IFGain:Low #Atten: 40 dB Radio Device: BTS						
Ref Offset 1 dB 10 dB/div Ref 25.00 dBr Log	n						
15.00					Center Freq 2.48000000 GHz		
-15.0							
-25.0			where the second				
-45.0			M 244 44 44 10 10 10 10 10 10 10 10 10 10 10 10 10	honor			
Center 2.48 GHz			Sr	an 4 MHz			
#Res BW 100 kHz		#VBW 300 kHz		eep 2 ms	CF Step 400.000 kHz uto Man		
Occupied Bandwidt		Total Power	7.06 dBm	A	<u>uto</u> Man		
Transmit Freq Error	0872 MHz 32.938 kHz	OBW Power	99.00 %		Freq Offset 0 Hz		
x dB Bandwidth	724.4 kHz	x dB	-6.00 dB				
MSG			STATUS				



Appendix B: Occupied Bandwidth

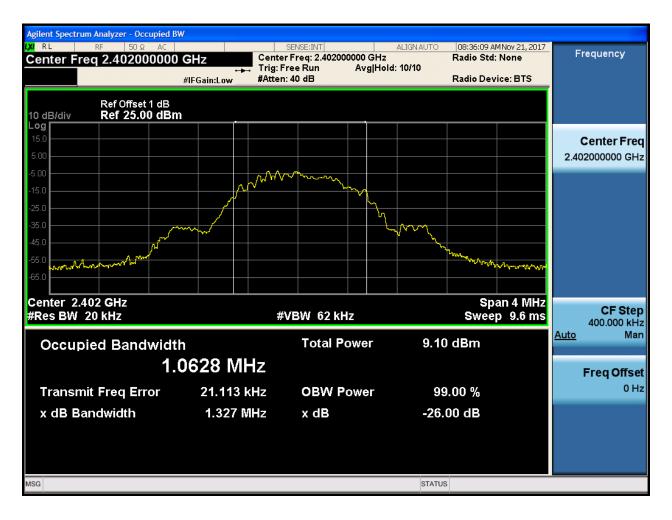
For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

Part I - Test Results

Test Mode	Test Channel	Test Channel Frequency[MHz] Occupied Bandwidth [MHz]		Verdict
TM1 _Ch0	L	2402	1.06	pass
TM1 _Ch19	М	2440	1.06	pass
TM1 _Ch39	Н	2480	1.06	pass

Part II - Test Plots

2.1 TM1_Ch0_L





2.2 TM1_Ch19_M

Agilent Spectrum Analyzer - Occupied I (X RL RF 50 Q AC Center Freq 2.440000000) GHz	SENSE:]NT Center Freq: 2.440000000 GH Trig: Free Run Avg H #Atten: 40 dB	z Radio St old: 10/10	AMNov 21, 2017 d: None avice: BTS	Frequency
Ref Offset 1 dB 10 dB/div Ref 25.00 dB	n				
Log 15.0 5.00					Center Freq 2.440000000 GHz
-5.00		W Many			
-35.0	man part -		haven		
-55.0				handyran	
Center 2.44 GHz #Res BW 20 kHz		#VBW 62 kHz		pan 4 MHz ep 9.6 ms	CF Step 400.000 kHz
Occupied Bandwid		Total Power	9.59 dBm		<u>Auto</u> Man
1.	.0637 MH	Z			Freq Offset
Transmit Freq Error	23.431 kH	z OBW Power	99.00 %		0 Hz
x dB Bandwidth	1.325 MH	z x dB	-26.00 dB		
MSG			STATUS		



2.3 TM1_Ch39_H

Agilent Spectrum Analyzer - Occupied BW X RL RF 50 Ω AC Center Freq 2.480000000 C			ALIGNAUTO 08:54:33 AMN Radio Std: N d: 10/10 Radio Device	one Frequency
Ref Offset 1 dB 10 dB/div Ref 25.00 dBm				
15.0 5.00				Center Freq 2.480000000 GHz
-5.00	- And	han the second s		
-35.0			m Mar Mar	
-55.0			We want want on	พาการในการ
Center 2.48 GHz #Res BW 20 kHz	#V	BW 62 kHz	Spar Sweep	400.000 KHZ
Occupied Bandwidth	638 MHz	Total Power	6.66 dBm	<u>Auto</u> Man
Transmit Freq Error	28.784 kHz	OBW Power	99.00 %	Freq Offset 0 Hz
x dB Bandwidth	1.326 MHz	x dB	-26.00 dB	
MSG			STATUS	



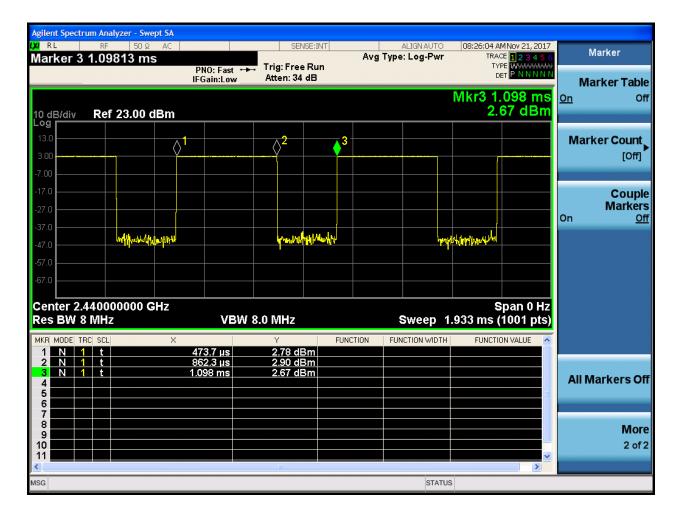
Appendix C: Duty Cycle

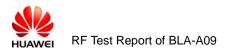
Part I - Test Results

Test Mode	TX Freq. [MHz]	Duty cycle [%]
TM1	CH0,CH19,CH39	62.24

Part II - Test Plots

2.1 TM1





Appendix D: Maximum Conducted Average Output Power

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Duty Cycle [%]	Power[dBm]	Verdict
TM1 _Ch0	L	2402	62.24	2.94	pass
TM1 _Ch19	М	2440	62.24	3.46	pass
TM1 _Ch39	н	2480	62.24	0.41	pass



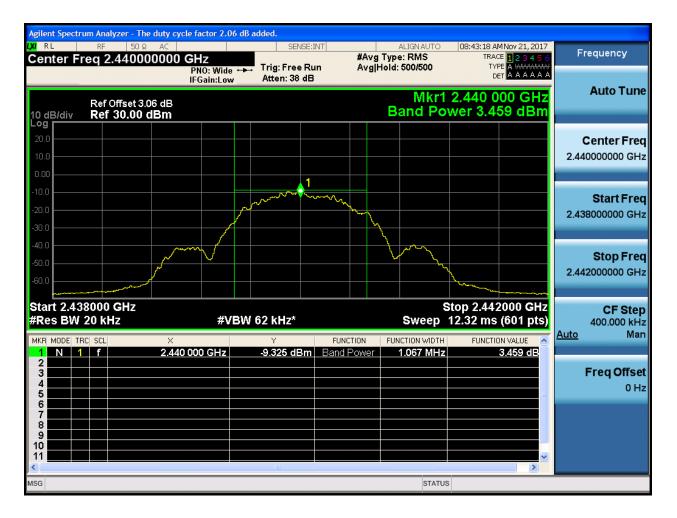
Part II - Test Plots

2.1 TM1_Ch0_L

Agilent Spectrun			actor 2.00	6 dB a									
Center Fre		AC 0000 GH	z			ISE:INT		vg Typ	ALIGNAUTO e: RMS	TRA	MNov 21, 2017 CE <mark>1 2 3 4 5 6</mark>	Frequen	су
	-	PN	IO: Wide Gain:Low		Trig: Free Atten: 38		Av	g Hold	500/500	[
	Ref Offset 3.0	6 dB							Mkr1	2.402 (000 GHz	Auto	Tune
10 dB/div Log	Ref 30.00 d	IBm						В	and Po	wer 2.9	36 dBm		
20.0												Cente	r Freq
10.0												2.40200000	
0.00						1							
-10.0				\vdash	~~~~~~							Star	tFreq
-20.0				\nearrow	~~ -	ىر		1				2.4000000	
-30.0			1					My -					
-40.0								t	\sim			Stor	Freq
-50.0		7							<u> </u>	1		2.40400000	
-60.0										June			
Start 2.400 #Res BW 2			#\/I		62 kHz*				Sween	top 2.40	4000 GHz ; (601 pts)		Step
		U.	#V	- 111		E DU	CTION					Auto	00 kHz Man
MKR MODE TRU		× 2.402.000	0 GHz		۲ -10.020 dE				1.067 MHz	FUNCT	2.936 dB		
2 3												Freq	Offset
4 5											=		0 Hz
6													
8													
10													
11					Ш						×		
MSG									STATUS	3			

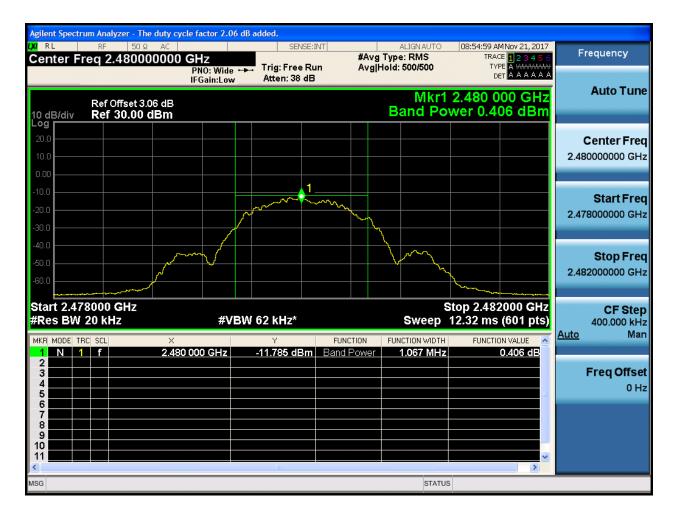


2.2 TM1_Ch19_M





2.3 TM1_Ch39_H



Appendix E: Maximum Power Spectral Density Level

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Duty Cycle [%]	PSD [dBm/10KHz]	Verdict
TM1 _Ch0	L	2402	62.24	-11.67	pass
TM1 _Ch19	М	2440	62.24	-10.94	pass
TM1 _Ch39	н	2480	62.24	-13.38	pass

Part II - Test Plots

2.1 TM1_Ch0_L





2.2 TM1_Ch19_M





2.3 TM1_Ch39_H





Appendix F: Band Edges Compliance

Part I - Test Results

Test Mode	Test Channel	Frequency [MHz]	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
TM1 _Ch0	L	2402	2.23	-51.09	pass
TM1 _Ch39	Н	2480	-0.16	-50.85	pass

Part II - Test Plots

2.1 TM1_Ch0_L

	um Analyzer - Sv									
(XI RL Center Ei	RF 50 1 req 2.3925		17	SENS	E:INT		ALIGNAUTO	TRAC	MNov 21, 2017	Frequency
Center I	64 2.3323	PI	10:Wide ↔	Trig: Free Atten: 40 c		Avg Hold:		TY	PE MWWWWW	
		IF	Gain:Low	Atten: 40 d	18					Auto Tune
	Ref Offset 1						IVIKI	2 2.400	00 GHZ 93 dBm	
10 dB/div Log	Ref 30.00	dBm						-51.0	5 uBill	
20.0										Center Freq
10.0								<u> </u>	1	2.392500000 GHz
0.00								rV		
-10.0								<u> </u>		
-20.0									۱ <u> </u>	Start Freq
-30.0								<u></u>	-27.77 dBm	2.380000000 GHz
-40.0									4	
								21	X	Stop Freq
-50.0	مەر _{ىمە} ر ئىرىمىيەر مەراپارمەللەر	┿╍ <mark>╏</mark> ┝╍╲╼╍╏ _╊ ╱┝╼╍╍┝╱╲┲┓	rlyflalgaalaysagaaqaa	Jard ^a y™vJ[v]№126-ovj <mark>k</mark> yN	اموری ^{الر} رالدین ^س را _ک اریند	ᡔ᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆᠆	فالمرجع الماسي وساعياهما العومي	xtral	հետովիմեզ	2.40500000 GHz
-60.0										
Start 2.38	000 GHz							Stop 2.40)500 GHz	CF Step
#Res BW			#VB\	N 300 kHz		-	#Sweep	100.0 ms	(601 pts)	2.500000 MHz
MKR MODE TF	RC SCL	×		Y	FUNC	TION FUN	ICTION WIDTH	FUNCTIO)N VALUE	<u>Auto</u> Man
1 N 1 2 N 1	f	2.402 2 2.400 0		2.234 dB -51.093 dB	m					
2 N 1 3		2.400 0	UGHZ	-51.095 aBi	m					Freq Offset
4										0 Hz
6										
8										
9										
10									~	
<									>	
MSG							STATU	S		



2.2 TM1_Ch39_H

Agilent Spectrum Analyzer - Swept SA					
XX RL RF 50Ω AC		NSE:INT	ALIGNAUTO Type: Log-Pwr	08:58:10 AM Nov 21, 201 TRACE 1 2 3 4 5	
	NO: Wide ↔ Trig: Fre Gain:Low Atten: 44	e Run AvgjH	lold: 100/100		P
Ref Offset 1 dB 10 dB/div Ref 30.00 dBm			Mkr	2 2.483 50 GHz -50.846 dBm	Auto Tune
Log 20.0 10.0 0.00					Center Freq 2.483500000 GHz
-10.0 -20.0 -30.0				-30.17 dBr	Start Freq 2.473500000 GHz
-40.0	- Contracutor	2	Lyterary and the main and the second s	month and a second	Stop Freq 2.493500000 GHz
Start 2.47350 GHz #Res BW 100 kHz	#VBW 300 kHz		#Sweep	Stop 2.49350 GHz 100.0 ms (601 pts	CF Step 2.000000 MHz Auto Man
MKR MODE TRC SCL X	27 GHz -0.165 d		FUNCTION WIDTH	FUNCTION VALUE	Auto
2 N 1 f 2.483 5 3 4 5 5 6	50 GHz -50.846 d	Bm			Freq Offset 0 Hz
8 9 10					
11				×	
MSG			STATUS	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	



Appendix G: Unwanted Emissions into Non-Restricted Frequency

Bands

In this Appendix, the "Pref", which is used as the reference level, refers to the peak power level in any 100 kHz bandwidth within the fundamental emission, the "Puw" referrers to the maximum emission power in 100 kHz band segments outside of the authorized frequency band.

Considering that the higher ratio of RBW to the span for the frequency ranges below 30 MHz makes the results determination be complicated, a narrower RBW other than 100 kHz is used for these ranges. The measured value should add a RBW correction factor (RBWCF) where RBWCF [dB] = $10 \times lg(100 \ [kHz]/narrower RBW \ [kHz])$. As to this Appendix, the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain and used as respective results for each chain, due to the relative-limit requirement.

In the result table, the "< Limit" denotes that "The Puw [dBm] is less than Pref[dBm]-30[dBm],see test plots for detailed".

Test Mode	Test Channel	Frequency[MHz]	Pref[dBm]	Puw[dBm]	Verdict
TM1_Ch0	L	2402	2.258	<limit< td=""><td>pass</td></limit<>	pass
TM1_Ch19	М	2440	2.752	<limit< td=""><td>pass</td></limit<>	pass
TM1_Ch39	Н	2480	-0.219	<limit< td=""><td>pass</td></limit<>	pass

Part I - Test Results



Part II - Test Plots

2.1 TM1_Ch0_L

Pref:

	um Analyzer - Swept									
XI RL Center Fi	req 2.402000	ac 000 GHz				Avg Type	ALIGN AUTO :: Log-Pwr >1000/1000		MNov 21, 2017 CE	Frequency
			: Wide 🖵 in:Low	Atten: 30		Arginola.		D	T PPPPP	
10 dB/div Log	Ref Offset 1 dB Ref 20.00 dB	m					Mkr1	2.402 2 2.2	260 GHz 58 dBm	Auto Tui
										Center Fre
10.0					¹					2.402000000 G
0.00					\sim					Start Fre
-10.0			_/							2.400000000 G
-20.0										Stop Fre
-30.0			<u></u>			^	harrow and the second s			2.404000000 G
-40.0	<i>f</i>						۲. ۲.	Ru Maria		CF Ste
	and and							Mary Mary		400.000 kl <u>Auto</u> M
50.0 60.0 mm/// ^m	W. Carly Charles							ì	WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	Freq Offs
60.0 ()10									- 100	0
70.0										
Start 2.40	0000 GHz						S	top 2.404	4000 GHz	
≉Res BW			#VBW	300 kHz			Sweep	2.000 ms	(601 pts)	
ISG							STATUS			



Puw:

Agilent Spectr	um Analyzer - Swept SA								
LXI RL	RF 50 Ω 🚹 DC	S	ENSE:INT	Avg Type		08:37:32 AMI	Nov 21, 2017	Fre	quency
Center Fi	req 79.500 kHz	PNO: Close 😱 Trig: Fro IFGain:Low #Atten: :		Avg Hold:		TYPE	123456 M wwwww PPPPPP		
10 dB/div Log	Ref Offset 1 dB Ref 0.00 dBm				N	1kr1 10.8 -79.21	80 kHz 3 dBm		Auto Tune
-10.0								C	e nter Freq 79.500 kHz
-20.0									Start Freq 9.000 kHz
-40.0							-47.74 dBm		Stop Freq 150.000 kHz
-60.0								<u>Auto</u>	CF Step 14.100 kHz Man
♦ ¹								F	r eq Offset 0 Hz
		hay yayang ang ang ang ang ang ang ang ang ang		ᡏ᠋ᢣ᠕ᠰᡵᢩ᠆ᠰᡆᡵᡗᡟ᠋ᡧ	d for all a		Նահմբայններ		
Start 9.00 #Res BW		#VBW 3.0 kHz			Sweep	Stop 150 134.8 ms ().00 kHz 601 pts)		
MSG					STATUS	s 🚺 DC Coup	led		



	pectrum Analyzer - Swe									
LXI RL Cente	RF 50 ହ er Freq 15.0750				ISE:INT	Avg Type	ALIGNAUTO :: Log-Pwr	TRAC	4Nov 21, 2017 E <mark>1 2 3 4 5 6</mark>	Frequency
		PN	IO: Wide 🖵 Gain:Low	Trig: Free #Atten: 40		Avg Hold:		DE		
10 dB/d Log	Ref Offset 1 d liv Ref 20.00 d						M	kr1 26.4 -62.0	98 MHz 70 dBm	Auto Tune
10.0 —										Center Freq 15.075000 MHz
0.00										Start Freq 150.000 kHz
-20.0										Stop Freq 30.000000 MHz
									-37.74 dBm	CF Step
-40.0										2.985000 MHz <u>Auto</u> Man
-60.0								^1		Freq Offset
70.0	hilwoody allowed providents allow			and the second	had best the states the	a log hill be a being	admant the design of the second	lande a favelande.	ناد الدي وازام ^{ال} (ي اواليا.	0 Hz
-70.0										
Start 1 #Res E	150 kHz BW 10 kHz		#VBW	30 kHz			Sweep_2	Stop 3 85.4 ms (0.00 MHz 3001 pts)	
MSG							STATUS	🗜 DC Cou	pled	



Agilent Spectr	um Analyzer - Swe									
XIRL	_{RF} 50 Ω req 1.16500		1	SEN	ISE:INT		ALIGNAUTO : Log-Pwr		4Nov 21, 2017 E 1 2 3 4 5 6	Frequency
Center F	req 1.16500	Р	12 NO: Fast 🖵 Gain:Low	Trig: Free #Atten: 40		Avg Hold:		TYF	E MWWWWW P P P P P P	
10 dB/div Log	Ref Offset 1 d Ref 20.00 d	IB IBm					Mkı	1 1.976 -48.6	53 GHz 46 dBm	Auto Tune
10.0										Center Freq 1.165000000 GHz
-10.0										Start Freq 30.000000 MHz
-20.0									-27.74 dBm	Stop Freq 2.300000000 GHz
-40.0								↓ ↓ ↓	1	CF Step 227.000000 MHz <u>Auto</u> Man
-50.0 -60.0	lanatha ainte in an ann an an ann an ann an ann an ann an a	an that is the first state	(della) and all dended as a produced and a second sec a second	a digita di pangan d Pangan di pangan di pa		allin da hili ya fa kali ya ji 1944 - Angela Santa Santa Santa 1944 - Angela Santa Santa Santa Santa	a fita dina dia 1140 a. Ilay kaominina Managina dia kaominina dia k Managina dia kaominina dia k		and the second secon	Freq Offset
-70.0										0 H2
Start 30 N #Res BW			#VBW	300 kHz			Sweep 2	Stop 2 217.1 ms (.300 GHz 8001 pts)	
ISG							STATU	s		



Start Freq 2.30000000 GHz -27.74 dbm 2.40000000 GHz							0.00
-27.74 dBm 2.400000000 GHz							10.0
05.0100							20.0
CF Step							30.0 40.0
10.000000 MHz <u>Auto</u> Man	habilitan	Arr Marth	matrice and the second second	بعبارالا العرب ومعارك	4. R. Jas Part 1. 10. 10/1970	watcher and a state of the	50.0
Freq Offset							60.0



	rum Analyzer - Swept SA					
X/ RL	RF 50 Ω AC		NSE:INT	ALIGN AUTO	08:38:33 AM Nov 21, 2017 TRACE 1 2 3 4 5 6	Frequency
Senter 1	100 2.43 11 3000	PNO: Wide Trig: Free IFGain:Low #Atten: 40		Hold:>200/200		
10 dB/div	Ref Offset 1 dB Ref 20.00 dBm			Mkr1 2.	.489 302 5 GHz -49.818 dBm	Auto Tune
10.0						Center Fred 2.491750000 GH:
0.00						Start Fred 2.483500000 GH
30.0					-27.74 dBm	Stop Free 2.500000000 GH:
40.0		1				CF Stej 1.650000 MH <u>Auto</u> Ma
60.0	what a show the for the second	M. W. Maler Mary Mary Mary Mary Mary Mary Mary Mar		ᠬᡰᡊ᠇ᢑᡀᢆᠧ᠆ᢢᡮᢛᢧᠯᠺ᠋᠕ᡁᡘᢩᡁ	ֈ ֈՙ ԻՆՆՆՆՆԳՐՙ ֈ ֈ՟ՆՙՙԻՆՆՆՆԴԽ	Freq Offse 0 H
70.0	83500 GHz				top 2.500000 GHz	
Res BW		#VBW 300 kHz			1.600 ms (601 pts)	
SG				STATUS		

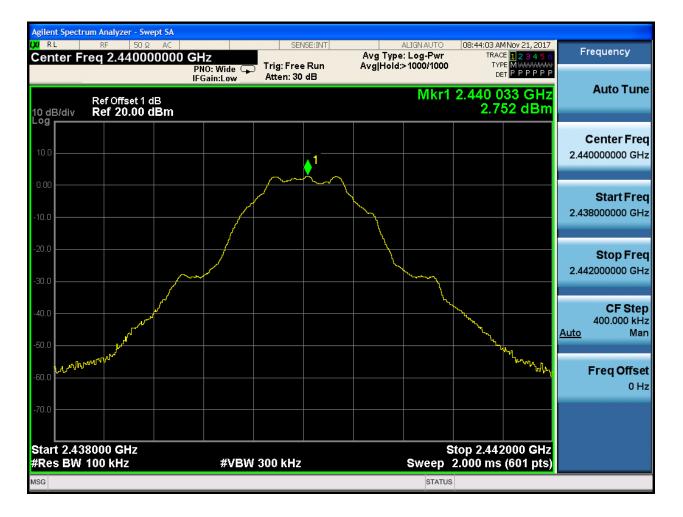


Agilent Spectr	um Analyzer - Swe	ept SA								
IXI RL		AC		SEN	ISE:INT		ALIGNAUTO		MNov 21, 2017	Frequency
Center F	req 14.5000	P	HZ NO: Fast 🖵 Gain:Low	Trig: Free #Atten: 40		Avg Type Avg Hold:	: Log-Pwr 10/10	TYF	^{СЕ} 123456 РЕМИЖИЖИ ТРРРРРР ТРРРРРР	
10 dB/div Log	Ref Offset 1 c Ref 20.00 c	IB IBm					Μ	kr1 25.5 -37.2	40 GHz 43 dBm	Auto Tune
10.0										Center Freq 14.50000000 GHz
-10.0										Start Freq 2.500000000 GHz
-20.0									-27.74 dBm	Stop Freq 26.50000000 GHz
-40.0	مى رومىل رۇلۇرلىرى يىرىمى بىر		a) saka bahanya ku	and a file						CF Step 2.400000000 GHz <u>Auto</u> Man
-60.0				and and a second se						Freq Offset 0 Hz
-70.0										
Start 2.50 #Res BW			#VBW	300 kHz			Sweep	Stop 2 2.294 s (6.50 GHz 8001 pts)	
MSG							STATUS	3		



2.2 TM1_Ch19_M

Pref:





Puw:

	um Analyzer - Swept SA						
Kenter Fr	RF 50 Ω <u>A</u> DC req 79.500 kHz	SEN		ALIGNAUTO Type: Log-Pwr	08:44:18 AMN TRACE	123456	Frequency
	104 7 3.300 KHZ	PNO: Close Trig: Free IFGain:Low #Atten: 26	eRun Avgļl	Hold:>50/50	TYPE DET	MWWWWW PPPPPP	
10 dB/div	Ref Offset 1 dB Ref 0.00 dBm			1	77.619 Wkr1		Auto Tune
_og							Center Freq
·10.0							79.500 kHz
20.0							Start Fred
-30.0							9.000 kHz
-40.0						-47.25 dBm	Stop Fred
-50.0							150.000 kHz
60.0							CF Step 14.100 kH
70.0						4	<u>luto</u> Mar
80.0 M	ñ A						Freq Offset
90.0	r (v)physiq har	ᡥᢦ᠕ᢆᢇᢌᡗᠰᡕ᠕ᠥᡅᡰᡃᢆᡊᠼ᠆ᢐᡢᢧᠳ᠉	Ն.Ոււ	\mathcal{M}		սարվդդ	0 H2
Start 9.00 ≉Res BW		#VBW 3.0 kHz		Sweep	Stop 150 134.8 ms (.00 kHz 601 pts)	
ISG					L DC Coup		



Agilent Spect	rum Analyzer - Sv									
X/RL		2 🚹 DC		SEN	NSE:INT		ALIGN AUTO		1Nov 21, 2017	Frequency
Center F	req 15.075	19	10: Wide 🖵 Gain:Low	Trig: Free #Atten: 40		Avg Type Avg Hold:	:: Log-Pwr >50/50	TYP	E 123456 E MWWWW T P P P P P	
10 dB/div Log	Ref Offset 1 Ref 20.00							Mkr1 2 -62.84	210 kHz 15 dBm	Auto Tune
10.0										Center Freq 15.075000 MHz
-10.0										Start Freq 150.000 kHz
-20.0										Stop Freq 30.000000 MHz
-40.0									-37.25 dBm	CF Step 2.985000 MHz <u>Auto</u> Man
-60.0 1	glálások after ginglei balltag bloch	a this later has set	ad put from this take of the day	t district a star with the	vák allántikkan ateoria	h desserved fills a state on a	las de la svidle a t	ali ettelan ali inte	h	Freq Offset 0 Hz
-70.0				i di si si se i di la di la di si		antoi Jylinia Linia				
Start 150 #Res BW			#VBW	30 kHz			Sweep 2	Stop 30 85.4 ms (0.00 MHz 3001 pts)	
MSG							STATUS	DC Cou	pled	



Agilent Spectr	um Analyzer - Swept S								
Center F	RF 50Ω A req 1.1650000		SENSE		Avg Type:		08:44:59 AM TRACE	123456	Frequency
		PNO: Fast 🖵 IFGain:Low	Trig: Free R #Atten: 40 d		Avg Hold>	·50/50	TYPE DET	MWWWWW PPPPPP	
10 dB/div Log	Ref Offset 1 dB Ref 20.00 dBn	n				Mkı	1 2.128 3 -48.67	33 GHz 6 dBm	Auto Tune
10.0									Center Freq 1.165000000 GHz
-10.0									Start Freq 30.000000 MHz
-20.0								-27.25 dBm	Stop Freq 2.300000000 GHz
-40.0								↓ ¹	CF Step 227.000000 MHz <u>Auto</u> Man
-50.0 -60.0	ile aller og de beskelet ander beskelet som en s Som en som en	da galana da Unitaria da Kandara da Unitaria. Producto da serie da Candara da Ca	a de la diserción y a contra de de di nomen el regel popular de la diserción nomen el regel popular de la diserción	nediperdity of Archeol States - States - States - States States - States	(14) on his standards of Alf I manager (1999)	<mark>i Meningkan Jakim (kila) (kila)</mark> Kana Bagina Jawa Maraki	in a fan de sen en de fan de fan de sen en de fan New yn a de fan gerin fan de sen en de fan	n a cineta) e brail)	Freq Offset 0 Hz
-70.0									
Start 30 N #Res BW		#VBW	300 kHz		s	weep 2	:Stop 2 217.1 ms (8	300 GHz :001 pts)	
MSG						STATU	s		



Agilent Spectr	um Analyzer - Swept SA								
XIRL	RF 50Ω AC		SEN	SE:INT		ALIGN AUTO		1Nov 21, 2017	Frequency
Center F	req 2.3500000	PNO: Fast 😱 IFGain:Low	Trig: Free #Atten: 40		Avg Hold:		TYP	E M WWWWWW T P P P P P P	
10 dB/div	Ref Offset 1 dB Ref 20.00 dBm	1				М	kr1 2.399 -49.10) 5 GHz)9 dBm	Auto Tune
10.0									Center Freq 2.350000000 GHz
-10.0									Start Freq 2.300000000 GHz
-20.0								-27.25 dBm	Stop Freq 2.400000000 GHz
-40.0								1	CF Step 10.000000 MHz <u>Auto</u> Man
-60.0	ngulan <mark>bantan kungu</mark> la.	ĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸ	₽ ₄ ¶q#{[.+4;4]¥484	utyradyster When	৻৻৵৾ঀ৻ ঢ়৾৾৾ঀ৾৾৻৵	464040.00196 ₉	╊ ╍ ┿╲╍┙╖┖ ╲╵ ┠┿╊┸╇┹╱╄╓╜	↓₽₽ ₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	Freq Offset 0 Hz
-70.0									
Start 2.30 #Res BW		#VBW	300 kHz			Sweep	Stop 2.40 9.600 ms (*	000 GHz 1001 pts)	
ISG						STATU	JS		



	rum Analyzer - Swe										
Center F	RF 50 Ω req 2.49175	AC 50000 G	Hz		ISE:INT	Avg Type	ALIGN AUTO : Log-Pwr	TRAC	4Nov 21, 2017 E 1 2 3 4 5 6	Frequency	
		P	NO: Wide 🖵 Gain:Low	Trig: Free #Atten: 40		Avg Hold:		DE	РЕ М ИЛИМИИ Т Р Р Р Р Р Р	Auto Tu	
10 dB/div Log	Ref Offset 1 c Ref 20.00 c						Mkr1 2	.491 942 -49.6	2 5 GHz 77 dBm	Autoru	TIE
10.0										Center Fr 2.491750000 G	- 1 I
-10.0										Start Fr 2.483500000 G	
-20.0									-27.25 dBm	Stop Fr 2.500000000 G	
-40.0					∮ ¹				-0	CF St 1.650000 M <u>Auto</u> M	
-60.0	᠆ᢆᡰᡊ᠆ᠯᡟᠺᢢᡟᡊᢧᡟᡆᢪᢦᢇ	ᡁᡊᢆᢔᠯᡆᡀᡅᢛᠬᡪᢧ᠋᠆ᡗᢦᡏ	ᠾᢇᡗᠧ᠋ᢪᠰᠢᢧᠰᡙ᠕	ᡁᢇᡅᡘᡃᡧᢧᡰᡀᡟᡃᡶᢅᢦ	մ ^{՝ ն} ֆու ⁻ ույ ⁰ գե _մ ով	Ն ե _տ ու-Գլ/ԴՄՍլաԴ.,	ᡥᢗᡁᡟᡊᡀᡁ᠋ᢩᡟᠬᠾ	<u>[[</u> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ᡃᠧᠷᡃᡃᡃᡅᡗᠧᡘ᠈ᡁᡘᡁ	Freq Offs 0	set Hz
	3500 GHz							Stop 2.500	0000 GHz		
#Res BW	100 KHZ		#VBW	300 kHz			Sweep		(601 pts)		







2.3 TM1_Ch39_H

Pref:

	rum Analyzer - Swept										
(XIRL	RF 50Ω			SEN	ISE:INT	Avg Type			MNov 21, 2017 E 1 2 3 4 5 6	Fr	equency
Center F	req 2.480000	DUU GHZ PNO: 1 IFGain	Wide 🖵 n:Low	Trig: Free Atten: 30			>1000/1000	TYI			
10 dB/div Log	Ref Offset 1 dB Ref 20.00 dB	m					Mkr1	2.480 2 -0.2	267 GHz 19 dBm		Auto Tune
10.0					1						Center Freq 0000000 GHz
-10.0				\sim	~``\					2.47	Start Freq 8000000 GHz
-20.0							John Contraction of the second			2.48	Stop Freq 2000000 GHz
-40.0	Tealler And a							March March March		<u>Auto</u>	CF Step 400.000 kHz Man
-50.0	A A A A A A A A A A A A A A A A A A A							¥v,	WWWWW Low		Freq Offset 0 Hz
-70.0	'8000 GHz							ton 2 49	2000 GHz		
#Res BW			#VBW	300 kHz			Sweep	2.000 ms	(601 pts)		
MSG							STATUS				



Puw:

	um Analyzer - Swept SA								
XIRL	RF 50 Ω <u>A</u> DC req 79.500 kHz	SE	NSE:INT		ALIGNAUTO : Log-Pwr		4Nov 21, 2017 E 1 2 3 4 5 6	F	requency
Senter Fr	req 79.500 KHZ	PNO: Close		Avg Hold:		TYP			
0 dB/div	Ref Offset 1 dB Ref 0.00 dBm				N	lkr1 11.1 -80.4	115 kHz 57 dBm		Auto Tune
10.0									Center Fred 79.500 kH:
30.0									Start Fred 9.000 kH:
40.0 50.0							-50.22 dBm		Stop Free 150.000 kH
70.0								<u>Auto</u>	CF Stej 14.100 kH Ma
80.0 1	Λ.								Freq Offse
" ህ^ዘ ~ ጊ 90.0		wilphanppallyant		http://www.cha	ᡃᡁ᠇ᢏᠧᠾᠲᢐᡊᠯᡂᡰ᠇ᢩ	~ ₁ ~4. ¹ /4.4.	ᠾᡗᡃᡟᠯᢩ᠕ᢇᡗᡡ		
start 9.00 Res BW		#VBW 3.0 kHz			Sweep	Stop 15 134.8 ms	i0.00 kHz (601 pts)		
SG					_	DC Cou			



Agilent Spec	ctrum Analyzer - Swej									
X/RL	RF 50 Ω			SEN	ISE:INT		ALIGNAUTO		1Nov 21, 2017	Frequency
Center	Freq 15.0750	PN	O: Wide 🖵 Jain:Low	Trig: Free #Atten: 40		Avg Type Avg Hold:		TYP	E 123456 E M WWWW T P P P P P P	
10 dB/div Log	Ref Offset 1 d Ref 20.00 d	B Bm					M	kr1 21.2 -62.4	94 MHz 58 dBm	Auto Tune
10.0										Center Freq 15.075000 MHz
-10.0										Start Freq 150.000 kHz
-20.0										Stop Freq 30.000000 MHz
-40.0									-40.22 dBm	CF Step 2.985000 MH 7 <u>Auto</u> Mar
-60.0	ان المرابع الم	ndulla she shird	. In structure	u. Ala ana da ana ana ana ana ana ana ana ana	ور المولارية	a file a lag state a state of state	♦ 1 Nation all addressing of			Freq Offset 0 Hz
				The state of a second state of second se						
Start 15 #Res BV	0 kHz № 10 kHz		#VBW	30 kHz		1	Sweep 2	Stop 30 85.4 ms (0.00 MHz 3001 pts)	
/ISG							STATUS	L DC Cou	pled	



Agilent Spectr	rum Analyzer - Swep									
IXIRL	RF 50 Ω			SEN	ISE:INT		ALIGNAUTO : Log-Pwr		Nov 21, 2017	Frequency
Center F	req 1.165000	PN	Z 10: Fast 😱 iain:Low	Trig: Free #Atten: 40		Avg Hold:		TYP	123456 M WWWWW PPPPPP	
10 dB/div Log	Ref Offset 1 dE Ref 20.00 dE						Mk	r1 2.132 -48.05	30 GHz 57 dBm	Auto Tune
10.0										Center Freq 1.165000000 GHz
-10.0										Start Freq 30.000000 MHz
-20.0									-30.22 dBm	Stop Freq 2.300000000 GHz
-40.0									↓ 1	CF Step 227.000000 MHz <u>Auto</u> Man
ىرىم بەلغامراند <mark>ر.</mark>		the condition of the second state March 1996 and a second state of the second state of the second state of the second state of the second state of				in plant in the second s	a sela da sera da sera Na ferencia da sera da Na ferencia da sera da		y ny falonin'n fan yn die ar Jurie dae fel yn gener fan t	Freq Offset
-60.0										0 Hz
-70.0										
Start 30 N #Res BW			#VBW	300 kHz			Sweep 2	Stop 2. 217.1 ms (8	300 GHz 3001 pts)	
MSG							STATU	IS		



	rum Analyzer - Swe									
XIRL	RF 50 Ω		1_	SEN	ISE:INT		ALIGNAUTO :: Log-Pwr		4Nov 21, 2017 E 1 2 3 4 5 6	Frequency
Senter F	req 2.35000	P	1Z NO: Fast 🖵 Gain:Low	Trig: Free #Atten: 40		Avg Hold:		TYP		
10 dB/div	Ref Offset 1 d Ref 20.00 d						Μ	kr1 2.37 -49.0	5 6 GHz 53 dBm	Auto Tune
10.0										Center Freq 2.350000000 GHz
-10.0										Start Freq 2.300000000 GHz
-20.0									-30.22 dBm	Stop Freq 2.400000000 GHz
-40.0							∮ ¹			CF Step 10.000000 MHz <u>Auto</u> Mar
60.0	rold)MkafirvayylifytyyMkay		alor fragador a opini	vhrhiltad vyph	y +rwal/y/pow	₩ĸŧ ĮϞ ĮŪĻ ₽ĸაť ĮΛ _Ϸ ₩	hilly (Dave Arthury dav	⊍╄ ┿╢╱╹┟ ╱Ϸ ┟┝┟╢⋎ ╊╱╹ ╢	∿\^ _\ {}} <u></u>	Freq Offse 0 Hz
-70.0								Stop 2.40		
#Res BW			#VBW	300 kHz			Sweep	9.600 ms (1001 pts)	
ISG							STAT	JS		



(IRL	um Analyzer - Swept SA RF 50 Ω AC		SENSE:INT	ALIGN AUTO	08:57:13 AMNov 21, 2017	
	req 2.49175000	O GHZ	Frig: Free Run Atten: 40 dB	Avg Type: Log-Pwr Avg Hold:>200/200	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P P P P P	Frequency
0 dB/div	Ref Offset 1 dB Ref 20.00 dBm			Mkr1 2	499 505 0 GHz -49.773 dBm	Auto Tun
10.0						Center Fre 2.491750000 GH
0.00						Start Fre 2.483500000 GH
20.0					-30.22 dBm	Stop Fre 2.500000000 GH
						CF Ste 1.650000 MH <u>Auto</u> Ma
0.0	www.unulynuling.	-Manna Manna (/ / ¹ / 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/ 1/	ᢣᡁᡄᠧᡗᠯᡧᡀ᠋ᡗᡅᠬᠩᡁᡅᠬᠺᡁᢁᠺᢏ᠇ᢌ᠆᠆ᡅᡕ	LAConnormalization of the second s	Freq Offse 0 ⊢
	3500 GHz				top 2.500000 GHz	
Res BW	100 kHz	#VBW 3	00 KHZ	Sweep	1.600 ms (601 pts)	



Agilent Spectr	um Analyzer - Sw	ept SA								
LXI RL		AC		SEN	ISE:INT		ALIGN AUTO : Log-Pwr		MNov 21, 2017	Frequency
Center F	req 14.5000	Р	HZ NO: Fast 😱 Gain:Low	Trig: Free #Atten: 40		Avg Type Avg Hold:		TY	CE 1 2 3 4 5 6 PE M WWWWW ET P P P P P P	
10 dB/div Log	Ref Offset 1 o Ref 20.00 o						Μ	kr1 25.5 -38.0	55 GHz 68 dBm	Auto Tune
10.0										Center Freq 14.50000000 GHz
-10.0										Start Freq 2.500000000 GHz
-20.0									-30.22 dBm	Stop Freq 26.500000000 GHz
-40.0				ute <mark>l at an</mark> titute <mark>l</mark>						CF Step 2.400000000 GHz <u>Auto</u> Man
-60.0				i i siidu ya i gisa						Freq Offset 0 Hz
-70.0										
Start 2.50 #Res BW			#VBW	300 kHz			Sweep	Stop 2 2.294 s (6.50 GHz (8001 pts)	
MSG							STATUS	3		



Appendix H: Radiated Spurious Emission & Spurious in Restricted

Band

Note: We tested all modes, but the data presented below is the worst case.

Below 1GHz, RBW = 100 kHz, VBW = 300 kHz.

Above 1GHz, RBW = 1 MHz, VBW = 3 MHz.

The simultaneous transmission has been considered

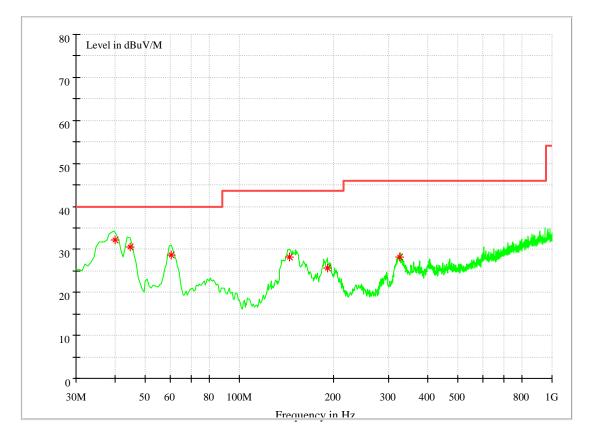


1.1 Part 1: Testing Range of "9 kHz to 30MHz"

NOTE1: No peak found in the Test Range of "9 kHz to 30MHz"

1.2 Part 2: Testing Range of "30 MHz to 1 GHz"

- Note 1: The test results and plot for testing range of "30 MHz to 1 GHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.
- Note 2: The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).



Frequency	Level	Limit	Margin	Height	Pol	Azimu	Transd.
40.027429	32.27	40.00	7.73	100.0	V	172.0	17.1
44.700572	30.65	40.00	9.35	100.0	V	182.0	16.6
60.425714	28.63	40.00	11.37	100.0	V	186.0	12.0
144.964286	28.20	43.50	15.30	100.0	V	260.0	12.9
190.990000	25.64	43.50	17.86	100.0	V	304.0	12.0
325.492857	28.34	46.00	17.66	109.0	Н	295.0	16.8

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss - preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level



1.3 Part 3: Testing Range of "1GHz to 3GHz"

Note 1: The testing range of "1GHz to 3 GHz" is for checking radiated emissions located in restricted bands near the EUT operating bands.

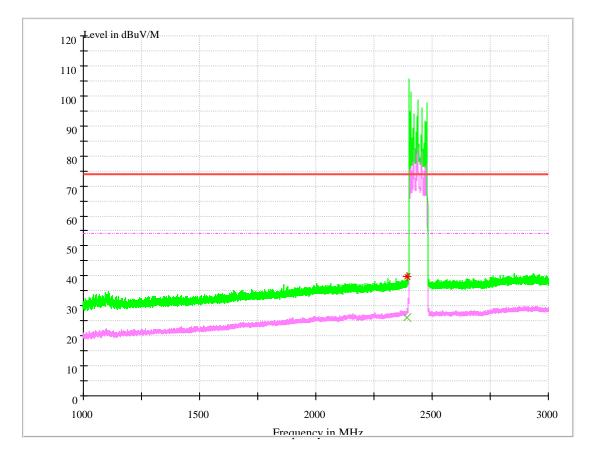
Note 2: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 $dB\mu V/m$) and Average Limit (54 $dB\mu V/m$).

Note 3: The peak spike exceeds the limit line is EUT's operating frequency.

Test Mode:

1.3.1Test Mode: TM1

1.3.1.1 Channel 0



MEASUREMENT RESULT: AV Detector

Frequency	Level	Limit	Margin	Height	Pol	Azimut	Transd.					
(MHz)	(dBµ V/m)	(dBµ V/m)	(dB)	(cm)		h	(dB)					
2390	26.23	54.00	27.77	150.0	Н	52.0	-8.6					
MEASUREMENT	MEASUREMENT RESULT: PK Detector											
Frequency	Level	Limit	Margin	Height	Pol	Azimut	Transd.					
(MHz)	(dBµ V/m)	(dBµ V/m)	(dB)	(cm)		h (deg)	(dB)					
2390	39.61	74.00	34.39	150.0	Н	300.0	-8.6					
	1			1	1	1	ı.					

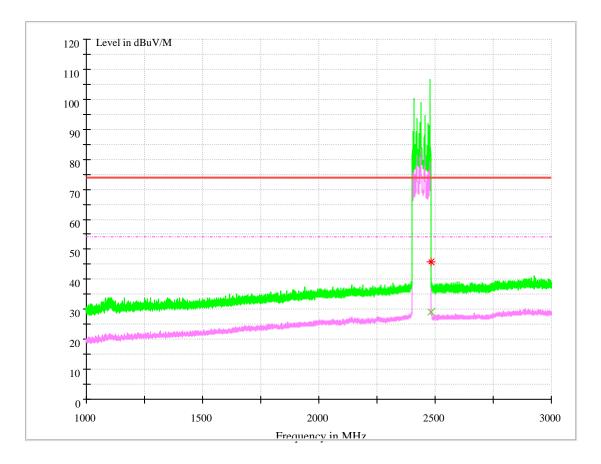


Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain) The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level

1.3.1.2 Channel 39



MEASUREMENT RESULT: AV Detector

Frequency	Level	Limit	Margin	Height	Pol	Azimut	Transd.
(MHz)	(dBµ V/m)	(dBµ V/m)	(dB)	(cm)		h	(dB)
2483.5	29.24	54.00	24.76	150.0	Н	44.0	-6.8

MEASUREMENT RESULT: PK Detector

Frequency	Level	Limit	Margin	Height	Pol	Azimut	Transd.
(MHz)	(dBµ V/m)	(dBµ V/m)	(dB)	(cm)		h (deg)	(dB)
2483.5	45.70	74.00	28.30	150.0	Н	50.0	-6.8

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss - preamplifier gain)

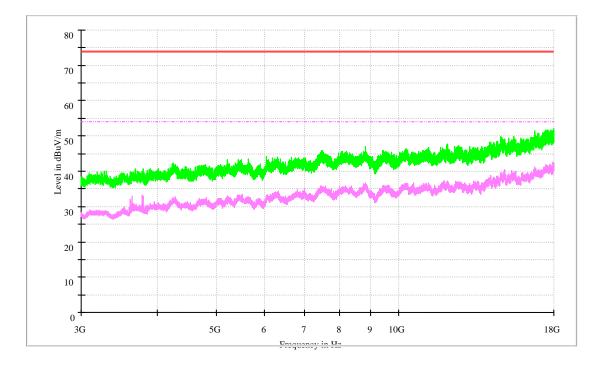
The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level



1.4 Part 4: Testing Range of "3 GHz to 18 GHz"

- Note 1: The test results and plot for testing range of "3 GHz to 18 GHz" showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.
- Note 2: The testing range of "3 GHz to 18 GHz" is for checking radiated emissions located in restricted bands far away from the EUT operating bands.
- Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 $dB\mu V/m$) and Average Limit (54 $dB\mu V/m$).



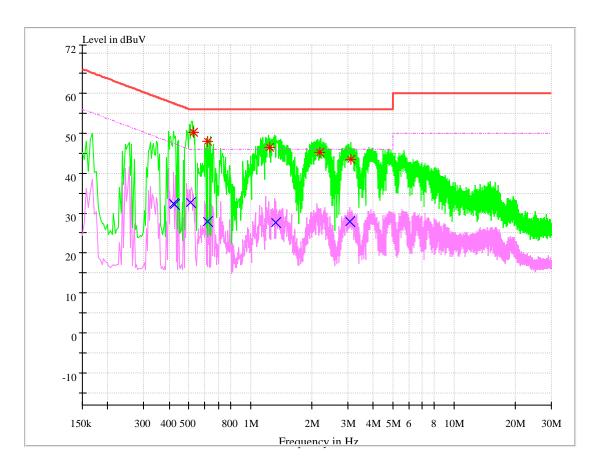
1.5 Part 5: Testing Range of "18 GHz to 26.5 GHz"

NOTE: No peak found in the Test Range of "18 GHz to 26.5GHz"



Appendix I: Conducted Emission at Power Port

Note: RBW =9 kHz, VBW = 30 kHz



Channel 39

MEASUREMENT RESULT: PK Detector

Frequency (MHz)	Level (dBµ V)	Limit (dBµ V)	Transd. (dB)	Margin (dB)	Line	PE
0.524187	50.23	56	9.7	5.77	Ν	FLO
0.528566	50.14	56	9.7	5.86	Ν	FLO
0.615642	47.94	56	9.7	8.06	L1	FLO
1.246367	46.35	56	9.7	9.65	Ν	FLO
2.196576	45.23	56	9.7	10.77	N	FLO
3.122019	43.54	56	9.7	12.46	Ν	FLO

MEASUREMENT RESULT: AV Detector

Frequency (MHz)	Level (dBµ V)	Limit (dBµ V)	Transd. (dB)	Margin (dB)	Line	PE
0.419546	32.30	47.46	9.7	15.16	L1	FLO
0.422736	32.08	47.40	9.7	15.32	Ν	FLO
0.510065	32.65	46.00	9.7	13.35	L1	FLO
0.620029	27.79	46.00	9.7	18.21	L1	FLO
1.334284	27.64	46.00	9.7	18.36	Ν	FLO
3.072933	27.77	46.00	9.7	18.23	Ν	FLO

Note:

1, Level =Reading level by receiver + Transd (Antenna factor + cable loss – preamplifier gain)

The reading level is calculated by software which is not shown in the sheet.

2, Margin=Limit - Level

END